

SEQUENCE LISTING

(1) GENERAL INFORMATION:

- (i) APPLICANT: Salerno, John C.
- (ii) TITLE OF INVENTION: APPLICATIONS FOR REGULATORY REGION OF NOS ISOFORMS
- (iii) NUMBER OF SEQUENCES: 35
- (iv) CORRESPONDENCE ADDRESS:
 - (A) ADDRESSEE: Hamilton, Brook, Smith & Reynolds, P.C.
 - (B) STREET: Two Militia Drive
 - (C) CITY: Lexington
 - (D) STATE: Massachusetts
 - (E) COUNTRY: USA
 - (F) ZIP: 02173
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy disk
 - (B) COMPUTER: IBM PC compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER: US 08/679,006
 - (B) FILING DATE: 12-JUL-1996
 - (C) CLASSIFICATION:
- (viii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Brook, David E.
 - (B) REGISTRATION NUMBER: 22,592
 - (C) REFERENCE/DOCKET NUMBER: JCS96-01
- (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: (617) 861-6240
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(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 45 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

Met	Ser	Gly	Pro	Tyr	Asn	Ser	Ser	Pro	Arg	Pro	Glu	Gln	His	Lys	Ser
1				5				10						15	
Tyr	Lys	Ile	Arg	Phe	Asn	Ser	Val	Ser	Cys	Ser	Asp	Pro	Leu	Val	Ser
		20					25						30		
Ser	Trp	Arg	Arg	Lys	Arg	Lys	Glu	Ser	Ser	Asn	Thr	Asp			
		35					40					45			

(2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 43 amino acids
 (B) TYPE: amino acid
 (C) STRANDEDNESS:
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Met Arg His Pro Asn Ser Val Gln Glu Glu Arg Lys Ser Tyr Lys Val
1 5 10 15
Arg Phe Asn Ser Val Ser Ser Tyr Ser Asp Ser Arg Lys Ser Ser Gly
 20 25 30
Asp Gly Pro Asp Leu Leu Arg Asp Asn Phe Glu
 35 40

(2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 16 amino acids
 (B) TYPE: amino acid
 (C) STRANDEDNESS:
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Lys Lys Ser Leu Phe Met Leu Arg Glu Leu Asn His Thr Phe Arg Tyr
1 5 10 15

(2) INFORMATION FOR SEQ ID NO:4:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (C) STRANDEDNESS:
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

Gln Tyr Lys Ala Ser Thr Leu Glu Glu Glu Gln Leu Leu Leu
1 5 10

(2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 15 amino acids
 (B) TYPE: amino acid
 (C) STRANDEDNESS:
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

His Asp Ile Asp Gln Lys Leu Ser His Leu Gly Ala Ser Gln Leu
1 5 10 15

(2) INFORMATION FOR SEQ ID NO:6:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (C) STRANDEDNESS:
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

Glu Tyr Asp Val Val Ser Leu Glu His Glu Ala Leu Val Leu
1 5 10

(2) INFORMATION FOR SEQ ID NO:7:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 15 amino acids
 (B) TYPE: amino acid
 (C) STRANDEDNESS:
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

Ala Ala Val Asp Thr Arg Leu Glu Glu Leu Gly Gly Glu Arg Leu
1 5 10 15

(2) INFORMATION FOR SEQ ID NO:8:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (C) STRANDEDNESS:
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

Glu Tyr Asp Ile Val His Leu Glu His Glu Ala Leu Val Leu
1 5 10

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 15 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

His Ala Val Asp Thr Leu Leu Glu Glu Leu Gly Gly Glu Arg Ile
1 5 10 15

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 5 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

Arg Arg Lys Arg Lys
1 5

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 5 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

Lys Lys Arg Lys Arg
1 5

(2) INFORMATION FOR SEQ ID NO:12:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 6 amino acids
 (B) TYPE: amino acid
 (C) STRANDEDNESS:
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

Trp Arg Arg Lys Arg Lys
1 5

(2) INFORMATION FOR SEQ ID NO:13:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 11 amino acids
 (B) TYPE: amino acid
 (C) STRANDEDNESS:
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

Ser Ser Trp Arg Arg Lys Arg Lys Glu Ser Ser
1 5 10

(2) INFORMATION FOR SEQ ID NO:14:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 36 amino acids
 (B) TYPE: amino acid
 (C) STRANDEDNESS:
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

Ser Ser Pro Arg Pro Glu Gln His Lys Ser Tyr Lys Ile Arg Phe Asn
1 5 10 15

Ser Val Ser Cys Ser Asp Pro Leu Val Ser Ser Trp Arg Arg Lys Arg
 20 25 30

Lys Glu Ser Ser
 35

(2) INFORMATION FOR SEQ ID NO:15:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 28 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

Gln His Lys Ser Tyr Lys Ile Arg Phe Asn Ser Val Ser Cys Ser Asp
1 5 10 15

Pro Leu Val Ser Ser Trp Arg Arg Lys Arg Lys Glu
 20 25

(2) INFORMATION FOR SEQ ID NO:16:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 11 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

Gln Glu Glu Arg Lys Ser Tyr Lys Val Arg Phe
1 5 10

(2) INFORMATION FOR SEQ ID NO:17:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 12 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

Arg Pro Glu Gln His Lys Ser Tyr Lys Ile Arg Phe
1 5 10

(2) INFORMATION FOR SEQ ID NO:18:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

Ser Asp Ser Arg Lys Ser Ser Gly Asp Gly Pro Asp Leu Arg
1 5 10

(2) INFORMATION FOR SEQ ID NO:19:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 30 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

Gln Glu Glu Arg Lys Ser Tyr Lys Val Arg Phe Asn Ser Val Ser Ser
1 5 10 15

Tyr Ser Asp Ser Gln Lys Ser Ser Gly Asp Gly Pro Asp Leu
20 25 30

(2) INFORMATION FOR SEQ ID NO:20:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

Thr Glu Thr Gly Lys Ser Glu Ala Leu Ala
1 5 10

(2) INFORMATION FOR SEQ ID NO:21:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

Thr Asp Thr Gly Lys Thr Glu Ala Leu Ala
1 5 10

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

Ala Val Asp Thr Leu Leu Glu Glu Leu Gly Gly Glu Arg Thr
1 5 10

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

Asp Ile Asp Gln Lys Leu Ser His Leu Gly Ala Ser Gln Thr
1 5 10

(2) INFORMATION FOR SEQ ID NO:24:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

Asp Asp Val Val Ser Leu Glu His Glu Thr
1 5 10

(2) INFORMATION FOR SEQ ID NO:25:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

Asp Ile Val His Leu Glu His Glu Ser
1 5

(2) INFORMATION FOR SEQ ID NO:26:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

Lys Ala Ser Thr Leu Glu Glu Glu Gln
1 5

(2) INFORMATION FOR SEQ ID NO:27:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 12 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

Arg Pro Glu Gln His Lys Ser Tyr Lys Ile Arg Phe
1 5 10

(2) INFORMATION FOR SEQ ID NO:28:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 30 amino acids
 (B) TYPE: amino acid
 (C) STRANDEDNESS:
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

Gln Glu Glu Arg Lys Ser Tyr Lys Val Arg Phe Asn Ser Val Ser Ser
1 5 10 15
Tyr Ser Asp Ser Arg Lys Ser Ser Gly Asp Gly Pro Asp Leu
 20 25 30

(2) INFORMATION FOR SEQ ID NO:29:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 135 amino acids
 (B) TYPE: amino acid
 (C) STRANDEDNESS:
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

Glu Ser Ser Phe Val Glu Lys Met Lys Lys Thr Gly Arg Asn Ile Ile
1 5 10 15
Val Phe Tyr Gly Ser Gln Thr Gly Thr Ala Glu Glu Phe Ala Asn Arg
 20 25 30
Leu Ser Lys Asp Ala His Arg Tyr Gly Met Arg Gly Met Ser Ala Asp
 35 40 45
Pro Glu Glu Tyr Asp Leu Ala Asp Leu Ser Ser Leu Pro Glu Ile Asp
 50 55 60
Asn Ala Leu Val Val Phe Cys Met Ala Thr Tyr Gly Glu Gly Asp Pro
65 70 75 80
Thr Asp Asn Ala Gln Asp Phe Tyr Asp Trp Leu Gln Glu Thr Asp Val
 85 90 95
Asp Leu Ser Gly Val Lys Phe Ala Val Phe Gly Leu Gly Asn Lys Thr
 100 105 110
Tyr Glu His Phe Asn Ala Met Gly Lys Tyr Val Asp Lys Arg Leu Glu
 115 120 125
Gln Leu Gly Ala Gln Arg Ile
 130 135

(2) INFORMATION FOR SEQ ID NO:30:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 168 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

Gly	Thr	Leu	Met	Ala	Lys	Arg	Val	Lys	Ala	Thr	Ile	Leu	Tyr	Ala	Ser	1	5	10	15
Glu	Thr	Gly	Arg	Ala	Gln	Ser	Tyr	Ala	Gln	Gln	Leu	Gly	Arg	Leu	Phe	20	25	30	
Arg	Lys	Ala	Phe	Asp	Pro	Arg	Val	Leu	Cys	Met	Asp	Glu	Tyr	Asp	Val	35	40	45	
Val	Ser	Leu	Glu	His	Glu	Thr	Leu	Val	Leu	Val	Val	Thr	Ser	Thr	Phe	50	55	60	
Gly	Asn	Gly	Asp	Pro	Pro	Glu	Asn	Gly	Glu	Ser	Phe	Ala	Ala	Ala	Leu	65	70	75	80
Met	Glu	Met	Ser	Gly	Pro	Tyr	Asn	Ser	Ser	Pro	Arg	Pro	Glu	Gln	His	85	90	95	
Lys	Ser	Tyr	Lys	Ile	Arg	Phe	Asn	Ser	Val	Ser	Cys	Ser	Asp	Pro	Leu	100	105	110	
Val	Ser	Ser	Trp	Arg	Arg	Lys	Arg	Lys	Glu	Ser	Ser	Asn	Thr	Asp	Ser	115	120	125	
Ala	Gly	Ala	Gly	Thr	Leu	Arg	Phe	Leu	Cys	Val	Phe	Gly	Leu	Gly	Ser	130	135	140	
Arg	Ala	Tyr	Pro	His	Phe	Cys	Ala	Phe	Ala	Ala	Val	Asp	Thr	Arg	Leu	145	150	155	160
Glu	Glu	Leu	Gly	Gly	Glu	Arg	Leu									165			

(2) INFORMATION FOR SEQ ID NO:31:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 166 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

Gly	Gln	Ala	Met	Ala	Lys	Arg	Val	Lys	Ala	Thr	Ile	Leu	Tyr	Ala	Thr
1				5					10					15	
Glu	Thr	Gly	Lys	Ser	Gln	Ala	Tyr	Ala	Lys	Thr	Leu	Cys	Glu	Ile	Phe
			20					25					30		
Lys	His	Ala	Phe	Asp	Ala	Lys	Ala	Met	Ser	Met	Glu	Glu	Tyr	Asp	Ile
		35				40						45			
Val	His	Leu	Glu	His	Glu	Ala	Leu	Val	Leu	Val	Val	Thr	Ser	Thr	Phe
	50					55					60				
Gly	Asn	Gly	Asp	Pro	Pro	Glu	Asn	Gly	Glu	Lys	Phe	Gly	Cys	Ala	Leu
65					70					75					80
Met	Glu	Met	Arg	His	Pro	Asn	Ser	Val	Gln	Glu	Glu	Arg	Lys	Ser	Tyr
				85					90					95	
Lys	Val	Arg	Phe	Asn	Ser	Val	Ser	Ser	Tyr	Ser	Asp	Ser	Arg	Lys	Ser
			100					105					110		
Ser	Gly	Asp	Gly	Pro	Asp	Leu	Arg	Asp	Asn	Phe	Glu	Ser	Thr	Gly	Pro
		115					120					125			
Leu	Ala	Asn	Val	Arg	Phe	Ser	Val	Phe	Gly	Leu	Gly	Ser	Arg	Ala	Tyr
	130					135					140				
Pro	His	Phe	Cys	Ala	Phe	Gly	His	Ala	Val	Asp	Thr	Leu	Leu	Glu	Glu
145					150					155					160
Leu	Gly	Gly	Glu	Arg	Ile										
				165											

(2) INFORMATION FOR SEQ ID NO:32:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 123 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

Arg	Lys	Val	Met	Ala	Ser	Arg	Val	Arg	Ala	Thr	Val	Leu	Phe	Ala	Thr
1				5					10					15	
Glu	Thr	Gly	Lys	Ser	Glu	Ala	Leu	Ala	Arg	Asp	Leu	Ala	Thr	Leu	Phe
			20					25					30		
Ser	Tyr	Ala	Phe	Asn	Thr	Lys	Val	Val	Cys	Met	Asp	Gln	Tyr	Lys	Ala
		35				40						45			
Ser	Thr	Leu	Glu	Glu	Glu	Gln	Leu	Leu	Leu	Val	Val	Thr	Thr	Phe	Gly
	50					55					60				

Asn	Gly	Asp	Cys	Pro	Ser	Asn	Gly	Gln	Thr	Leu	Lys	Lys	Ser	Leu	Phe
65					70					75					80
Met	Leu	Arg	Glu	Leu	Asn	His	Thr	Phe	Arg	Tyr	Ala	Val	Phe	Gly	Leu
				85					90					95	
Gly	Ser	Ser	Met	Tyr	Pro	Gln	Phe	Cys	Ala	Phe	Ala	His	Asp	Ile	Asp
			100					105					110		
Gln	Lys	Leu	Ser	His	Leu	Gly	Ala	Ser	Gln	Leu					
			115				120								

(2) INFORMATION FOR SEQ ID NO:33:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 116 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

Ala	Ile	Thr	Gly	Ile	Phe	Phe	Gly	Ser	Asp	Thr	Gly	Asn	Thr	Glu	Asn
1				5					10					15	
Ile	Ala	Lys	Met	Ile	Gln	Lys	Gln	Leu	Gly	Lys	Asp	Val	Ala	Asp	Val
			20					25					30		
His	Asp	Ile	Ala	Lys	Ser	Ser	Lys	Glu	Asp	Leu	Glu	Ala	Tyr	Asp	Ile
			35				40					45			
Leu	Leu	Leu	Gly	Ile	Pro	Thr	Trp	Tyr	Tyr	Gly	Glu	Ala	Gln	Cys	Asp
			50				55				60				
Trp	Asp	Asp	Phe	Phe	Pro	Thr	Leu	Glu	Glu	Ile	Asp	Phe	Asn	Gly	Lys
					70					75					80
Leu	Val	Ala	Leu	Phe	Gly	Cys	Gly	Asp	Gln	Glu	Asp	Tyr	Ala	Glu	Tyr
				85					90					95	
Phe	Cys	Asp	Ala	Leu	Gly	Thr	Ile	Arg	Asp	Ile	Ile	Glu	Pro	Arg	Gly
			100					105					110		
Ala	Thr	Ile	Val												
			115												

(2) INFORMATION FOR SEQ ID NO:34:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 120 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

Met	Pro	Lys	Ala	Leu	Ile	Val	Tyr	Gly	Ser	Thr	Thr	Gly	Asn	Thr	Glu
1				5					10					15	
Tyr	Thr	Ala	Glu	Thr	Ile	Ala	Arg	Glu	Leu	Ala	Asp	Ala	Gly	Tyr	Glu
			20					25					30		
Val	Asp	Ser	Arg	Asp	Ala	Ala	Ser	Val	Glu	Ala	Gly	Gly	Leu	Phe	Glu
		35					40					45			
Gly	Phe	Asp	Leu	Val	Leu	Leu	Gly	Cys	Ser	Thr	Trp	Gly	Asp	Asp	Ser
	50					55					60				
Ile	Glu	Leu	Gln	Asp	Asp	Phe	Ile	Pro	Leu	Phe	Asp	Ser	Leu	Glu	Glu
65					70					75					80
Thr	Gly	Ala	Gln	Gly	Arg	Lys	Val	Ala	Cys	Phe	Gly	Cys	Gly	Asp	Ser
				85					90					95	
Ser	Tyr	Glu	Tyr	Phe	Cys	Gly	Ala	Val	Asp	Ala	Ile	Glu	Glu	Lys	Leu
			100					105					110		
Lys	Asn	Leu	Gly	Ala	Glu	Ile	Val								
		115					120								

(2) INFORMATION FOR SEQ ID NO:35:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS:
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

Ala	Val	Asp	Thr	Arg	Leu	Glu	Glu	Leu	Gly	Gly	Glu	Arg	Thr
1				5					10				